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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,402	10/29/2003	Jeffrey B. Hardesty	DP-309961 (444859-093)	7386
22851	7590	02/03/2006	EXAMINER	
DELPHI TECHNOLOGIES, INC. M/C 480-410-202 PO BOX 5052 TROY, MI 48007			YEE, DEBORAH	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 02/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/696,402

Applicant(s)

HARDESTY ET AL.

Examiner

Deborah Yee

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8 to 10, 12-25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8 to 10 and 12-25 is/are rejected.
- 7) ☒ Claim(s) 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Upon further reconsideration, the indicated allowability of claims 8 to 10, 12 to 25 and 27 has been withdrawn.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8 to 10 and 12 to 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent 356105456 or Japanese patent 358174554 or Japanese patent 2000094182.
4. The English abstract of each patent discloses a filler alloy having a composition with constituents whose wt% ranges overlap or closely approximate those recited by the claims; such similarities establishes a prima facie case of obviousness because it would be obvious to one of ordinary skill in the art to select the claimed alloy ranges from the broader disclosure of the prior art since the prior art has the same utility, see MPEP 2144.05. Moreover prior art teaches a martensitic weldment.
5. Also note prior art specific examples closely meet the claimed composition except for lower amounts of Ti. See JP'554, alloy D in Table 1 on page 316; JP'182, alloy A12 in Table 1 on page 5; and JP'456, alloy 4 in column 9 on page 289.
6. Even though prior art teaches a lower Ti content, such would not be a patentable distinction. Note that it is the examiner's position that 1 to 1.5%Ti recited by claims 8

and 24, and 1.2 to 1.3%Ti recited by claim 13 fail to define patentable novelty over prior art whose lower upper Ti limit is less than 1% since the difference is not of patentable significance. Note that applicant's specification indicated 1 to 1.5% is preferred but there is nothing to show (e.g. by comparative test data) that it is critical or that it involves anything more than judicious selection. Moreover, applicant's specification on page 10 and original claims recite 10C to 1.5% is permissible and such broad range overlaps with prior art Ti range and hence establishes a prima facie case of obviousness.

7. Moreover, the abstract of each patent discloses a method of attaching two components comprising the steps of providing a first and second component and placing filler metal between first and second component and welding the filler metal to form a weld between first and second component, wherein said weld comprises martensite. Even though prior art does not teach the martensite in the weld to sufficiently increase the volume of the weld thereby at least partially offsetting shrinkage of the weld upon cooling as recited by claim 8, such would be expected since process steps are closely met to produce a martensitic weldment.

8. Note that the English abstract of JP'456 discloses more than 30% martensite in the weldment which is within the claimed ranges of 20 to 60% and 30 to 40% recited in claims 9 and 10, respectively. and the English abstract of JP'554 discloses a massive martensite structure at weld zone.

9. Also prior art teaches welding components used for automotive exhaust system which would broadly include flange and tube.

***Allowable Subject Matter***

10. Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: The art of record does not teach or fairly suggest a welded stainless steel article comprising a first low carbon stainless component comprising not more than about 0.1%C, 10.5 to 13%Cr and not more than 0.6%Ni welded to a second low carbon steel component comprising not more than 0.09% C, not more than about 0.15%Cr and not more than about 0.15%Ni, as claimed, wherein the weld joint between the first and second component comprising 20 to 60% martensite and has a stainless steel weld material comprising 10.5 to 13.0%Cr – 0.65 to 4%Ni and 1 to 1.5%Ti.

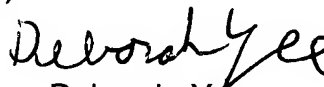
12. The art of record has been cited in a previous office action; hence no new copies are provided.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Yee whose telephone number is 571-272-1253. The examiner can normally be reached on Monday-Friday from 6:00 to 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Deborah Yee  
Primary Examiner  
Art Unit 1742

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